refractivity imbedded in the lens would come nearest. Such a bubble would replace a concave lens in front of the eye, and the rays brought more nearly to a focus would leave a deficiency around the area of convergence. Possibly the images in the preceding paragraph may be explained in the same way.

3. A third phenomenon is probably quite well known, though I must here also confess my ignorance. The diffuse and faint (false) corona which most people see around a distant point source, changes to an intensely brilliant and narrow colored ring with the blue packed close upon the red, whenever the pupil is opened by belladonna. That no true (objective) corona is in question may be proved at once by blotting out the point source with the sharp end of a pin, whereupon the phenomenon vanishes completely, although the region in which the corona was localized is still almost wholly visible. As the effect of the stimulus subsides the aperture of the red annulus, which is about 7 degrees in the brilliant and narrow state, with all colors close together, expands to about 9.5 degrees for the faint and diffuse case with the colors far apart, during the three or four days of contraction of the pupil.

The observation here in question is not lacking in interest for the physicist; yet I have often been provoked at not finding any allusion to such an obtrusive phenomenon in the treatises on optics with which I happen to be acquainted.

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PRESERVING SPIDERS' WEBS.

SPIDERS' webs are so interesting in themselves and each web is so characteristic of the particular species to which its maker belongs that their study is one of the most fascinating of natural history pursuits. However, if I am not mistaken, it is not generally known that they can be easily and permanently preserved for future study or display. One method of doing this occurred to me several years ago while watching Mr. Jas. H. Emerton spraying webs for photographing, and I have since used it so successfully that it seems worth describing.

The web to be preserved is sprayed with artist's shellac from an atomizer, in much the same way that crayon drawings are fixed, and immediately a clean glass plate is pressed against it, carefully breaking, at the same time, the supporting strands so that the web, which will stick to the glass, is freed from its former surroundings. Since every strand of the web is covered with minute droplets of shellac, they are rendered plainly visible and, furthermore, they adhere very tightly to the glass. In a short time the shellac will thoroughly dry and the plates holding the webs can be filed away in a cabinet or hung up for display. If desired, the web may be protected by covering it with another glass plate in the way that the film of a lantern slide is protected, but this is not usually necessary.

The above directions apply paticularly to the flat webs of the Epeiridæ, but with a little ingenuity almost any spider's web may be preserved in its natural form. For instance, I obtained a permanent mount of the dome-shaped web of *Linyphia marginata* in the following way: A branched twig was cut and stripped of its leaves. This was fastened in an upright position on a suitable base and several females of *L. marginata* put on it after sunset. The next morning I had a beautiful web with a perfect dome and all the outlying threads. The only thing that remained to be done was to spray it with shellac and set it away. The Theridiidæ also give very satisfactory specimens in much the same way. But for the orb webs I think the glass plates are preferable.

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A NEW METEORITE FROM SCOTT COUNTY, KANSAS.

A HITHERTO unreported meteorite fall took place on the night of September 2, 1905, about 9:30 P.M., in Scott County, Kansas. The fall was attended with the usual explosion, light and sound, variously compared to cannonading and the roll of heavy wagons.

Thus far fourteen pieces of the stone have

come to light, the largest of which, weighing 4.61 kilograms, is at present in the National Museum. A broken surface shows the stone to be indistinctly chondritic, of a very light gray color, and under the microscope is found to consist essentially of olivine and enstatite, with a very small amount of plagioclase feldspar. It evidently belongs to Brezina's group of veined chondrites (Cwa), and will be known as the Scott County meteorite.

For the above information the writer is indebted to Mr. J. K. Freed, of Scott City, Kansas. This fall adds one more (the twelfth) to the remarkable list for which Kansas is becoming noted.

George P. Merrill.

THE WALTER REED MEMORIAL FUND.

To the Editor of Science: It is gratifying to note, that the executive committee of the Walter Reed Memorial Association, under the able leadership of Dr. Daniel C. Gilman, is making a final effort to raise a fund of $25,000, the income to be paid to the widow of Dr. Reed and the principal to be reserved for a permanent memorial in the city of Washington.

It may not be amiss to recall the fact that Dr. Reed's greatest achievement for science and humanity was his contribution to the cause, spread and prevention of yellow fever. The experiments which he planned and conducted in Cuba in 1901, demonstrated conclusively the causal relation of the mosquito species *Stegomyia fasciata* to yellow fever, and have given man control over that fearful scourge. The practical value of this brilliant demonstration has been proved by the complete eradication of yellow fever epidemics in Havana, New Orleans, the Gulf states, the Isthmus of Panama and wherever his teachings have been subjected to a crucial test. Competent critics are agreed that his work is the most valuable contribution to medicine and public hygiene which has ever been made in this hemisphere. The results to humanity are incalculable and as well expressed by General Wood, the military governor of Cuba:

> Hereafter it will never be possible for yellow fever to gain such headway that quarantine will exist from the mouth of the Potomac to the mouth of the Rio Grande. * * * His discovery results in the saving of more lives annually than were lost in the Cuban War and saves the commercial interests of the world a greater financial loss each year than the cost of the Cuban War.

The full significance of this statement will be apparent when we recall the fact that, according to competent authorities, yellow fever in the United States alone, from 1793–1900, prostrated not less than 500,000 persons and carried off over 100,000 victims. According to Dr. Horlbeck, of Charleston, S. C., the great epidemic of 1878 in the states of Louisiana, Mississippi and Alabama resulted in the loss of nearly 16,000 lives, and the estimated total loss to the country resulting from this epidemic was not less than $100,000,000; indeed the actual cost of the epidemic of that year to the material resources of the city of New Orleans has been estimated by Dr. Samuel Chopin at $10,752,000.

In view of the great economic importance of Dr. Reed's discovery it is somewhat surprising to learn that by far the largest number of contributors are of the medical profession, and that so far the executive committee has failed to enlist the sympathy and support of the commercial interests, especially in the Gulf states, which will be most benefited by Dr. Reed's great work. While the medical profession has erected monuments to Benjamin Rush and Samuel D. Gross, who rendered distinguished services to American medicine and surgery, it must be conceded that Dr. Reed's beneficent work deserves a broader recognition and men of science should not be expected to sustain this laudable undertaking without material aid from other sources. Dr. Reed was a native of Virginia, and it seems peculiarly fitting that his work, which affects the lives, happiness and material interests of the people of the south Atlantic states, should be appreciated by popular subscriptions. There should be no difficulty in raising the modest sum of $25,000, and the writer expresses the hope that men of science will bring the merits of the case to the attention of their friends able and willing to contribute to this noble cause. Mr. C. J. Bell,